L Number	Hits	Search Text	DB	Time stamp
1	55	(two adj hybrid) near4 (bacteria or bacterial)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/04 16:18
2	2513	enzyme near3 domain	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/04 16:18
3	0	((two adj hybrid) near4 (bacteria or bacterial)) near8 (enzyme near3 domain)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/04 16:19
4	12	((two adj hybrid) near4 (bacteria or bacterial)) and (enzyme near3 domain)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/02/04 16:19

```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:ssspta1653sxs

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09   CA/CAplus records now contain indexing from 1907 to the
                   present
 NEWS  4  DEC 08   INPADOC: Legal Status data reloaded
 NEWS  5  SEP 29   DISSABS now available on STN
 NEWS  6  OCT 10   PCTFULL: Two new display fields added
 NEWS  7  OCT 21   BIOSIS file reloaded and enhanced
 NEWS  8  OCT 28   BIOSIS file segment of TOXCENTER reloaded and enhanced
 NEWS  9  NOV 24   MSDS-CCOHS file reloaded
 NEWS 10  DEC 08   CABA reloaded with left truncation
 NEWS 11  DEC 08   IMS file names changed
 NEWS 12  DEC 09   Experimental property data collected by CAS now available
                   in REGISTRY
 NEWS 13  DEC 09   STN Entry Date available for display in REGISTRY and CA/CAplus
 NEWS 14  DEC 17   DGENE: Two new display fields added
 NEWS 15  DEC 18   BIOTECHNO no longer updated
 NEWS 16  DEC 19   CROPU no longer updated; subscriber discount no longer
                   available
 NEWS 17  DEC 22   Additional INPI reactions and pre-1907 documents added to CAS
                   databases
 NEWS 18  DEC 22   IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
 NEWS 19  DEC 22   ABI-INFORM now available on STN
 NEWS 20  JAN 27   Source of Registration (SR) information in REGISTRY updated
                   and searchable
 NEWS 21  JAN 27   A new search aid, the Company Name Thesaurus, available in
                   CA/CAplus

 NEWS EXPRESS  DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 16:56:40 ON 04 FEB 2004

=> File bioscience health medicine meetings pharmacology research toxicology
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'ADISCTI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'ADISINSIGHT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'ADISNEWS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'AGRICOLA' ENTERED AT 16:57:11 ON 04 FEB 2004

FILE 'ANABSTR' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'AQUASCI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT 2004 FAO (On behalf of the ASFA Advisory Board). All rights reserved.

FILE 'BIOBUSINESS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Biological Abstracts, Inc. (BIOSIS)

FILE 'BIOCOMMERCE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 BioCommerce Data Ltd. Richmond Surrey, United Kingdom. All rights reserved

FILE 'BIOSIS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'BIOTECHABS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION

FILE 'BIOTECHDS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHNO' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CABA' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 CAB INTERNATIONAL (CABI)

FILE 'CANCERLIT' ENTERED AT 16:57:11 ON 04 FEB 2004

FILE 'CAPLUS' ENTERED AT 16:57:11 ON 04 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CEABA-VTB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 DECHEMA eV

FILE 'CEN' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'CIN' ENTERED AT 16:57:11 ON 04 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'CONFSCI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'CROPB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'CROPU' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DISSABS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'DDFB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DDFU' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DGENE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DRUGB' ACCESS NOT AUTHORIZED

FILE 'DRUGMONOG2' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'IMSDRUGNEWS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'DRUGU' ACCESS NOT AUTHORIZED

FILE 'IMSRESEARCH' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'EMBAL' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'EMBASE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'FEDRIP' ENTERED AT 16:57:11 ON 04 FEB 2004

FILE 'FOMAD' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FOREGE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FROSTI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FSTA' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 International Food Information Service

FILE 'GENBANK' ENTERED AT 16:57:11 ON 04 FEB 2004

FILE 'HEALSAFE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'IFIPAT' ENTERED AT 16:57:11 ON 04 FEB 2004

COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

FILE 'IMSPRODUCT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'JICST-EPLUS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)

FILE 'KOSMET' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 International Federation of the Societies of Cosmetics Chemists

FILE 'LIFESCI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'MEDICONF' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 FAIRBASE Datenbank GmbH, Hannover, Germany

FILE 'MEDLINE' ENTERED AT 16:57:11 ON 04 FEB 2004

FILE 'NIOSHTIC' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 U.S. Secretary of Commerce on Behalf of the U.S. Government

FILE 'NTIS' ENTERED AT 16:57:11 ON 04 FEB 2004
Compiled and distributed by the NTIS, U.S. Department of Commerce.
It contains copyrighted material.
All rights reserved. (2004)

FILE 'NUTRACEUT' ENTERED AT 16:57:11 ON 04 FEB 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'OCEAN' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 16:57:11 ON 04 FEB 2004
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2004 INIST-CNRS. All rights reserved.

FILE 'PCTGEN' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 WIPO

FILE 'PHAR' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PHARMAML' ENTERED AT 16:57:11 ON 04 FEB 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PHIC' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PHIN' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PROMT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Gale Group. All rights reserved.

FILE 'RDISCLOSURE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Kenneth Mason Publications Ltd.

FILE 'SCISEARCH' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT 2004 THOMSON ISI

FILE 'SYNTHLINE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Prous Science

FILE 'TOXCENTER' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 ACS

FILE 'USPATFULL' ENTERED AT 16:57:11 ON 04 FEB 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:57:11 ON 04 FEB 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'VETB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'VETU' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'WPIDS' ACCESS NOT AUTHORIZED

FILE 'WPINDEX' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'ABI-INFORM' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'CBNB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 ELSEVIER ENGINEERING INFORMATION, INC.

FILE 'CHEMLIST' ENTERED AT 16:57:11 ON 04 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'CSNB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'ENERGY' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 USDOE for the IEA-Energy Technology Data Exchange (ETDE)

FILE 'HSDB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 NATIONAL LIBRARY OF MEDICINE

FILE 'INIS' ACCESS NOT AUTHORIZED

FILE 'IPA' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 American Society of Hospital Pharmacists (ASHP)

FILE 'MSDS-CCOHS' ENTERED AT 16:57:11 ON 04 FEB 2004
Copyright Notice: Permission to copy is not required for this file

FILE 'MSDS-OHS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 MDL INFORMATION SYSTEMS (MDL)

FILE 'NAPRALERT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Board of Trustees of the University of Illinois,
University of Illinois at Chicago.

FILE 'NLDB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Gale Group. All rights reserved.

FILE 'POLLUAB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'RTECS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 U.S. Secretary of Commerce on Behalf of the U.S. Government (DOC)

FILE '1MOBILITY' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Society of Automotive Engineers, Inc.

FILE 'COMPENDEX' ENTERED AT 16:57:11 ON 04 FEB 2004
Compendex Compilation and Indexing (C) 2004
Elsevier Engineering Information Inc (EEI). All rights reserved.
Compendex (R) is a registered Trademark of Elsevier Engineering Information Inc.

FILE 'COMPUAB' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'CONF' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 FIZ Karlsruhe

FILE 'ELCOM' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'IMSDRUGCONF' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd.

FILE 'PAPERCHEM2' ENTERED AT 16:57:11 ON 04 FEB 2004
Paperchem2 compilation and indexing (C) 2004
Elsevier Engineering Information Inc. All rights reserved.

FILE 'SOLIDSTATE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'BABS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (c) 2004 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften
licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE 'DIOGENES' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 FOI Services, Inc. (FOI)

FILE 'INVESTEXT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Thomson Financial Services, Inc. (TFS)

FILE 'USAN' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 U.S. Pharmacopeial Convention, Inc. (USPC)

FILE 'DKF' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Dokumentation Kraftfahrwesen e.V., Germany

FILE 'FORIS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Informationszentrum Sozialwissenschaften, Bonn (IZS)

FILE 'FORKAT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Bundesministerium fuer Bildung,
Wissenschaft, Forschung und Technologie (bmb+f)

FILE 'RUSSCI' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Inputmax Ltd.

FILE 'SOLIS' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Informationszentrum Sozialwissenschaften, Bonn (IZS)

FILE 'UFORDAT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Umweltbundesamt, D-14191 Berlin (UBA)

```
FILE 'AQUIRE' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 US Environmental Protection Agency (EPA)

FILE 'ULIDAT' ENTERED AT 16:57:11 ON 04 FEB 2004
COPYRIGHT (C) 2004 Umweltbundesamt, D-14191 Berlin (UBA)

=> s (two hybrid) (4A) (bacteria or bacterial)
  18 FILES SEARCHED...
  36 FILES SEARCHED...
  56 FILES SEARCHED...
  66 FILES SEARCHED...
  87 FILES SEARCHED...
L1          520 (TWO HYBRID) (4A) (BACTERIA OR BACTERIAL)

=> s l1 (10A) (enzyme (3A) domain)
  23 FILES SEARCHED...
  47 FILES SEARCHED...
  79 FILES SEARCHED...
L2            1 L1 (10A) (ENZYME (3A) DOMAIN)

=> s  l1 and (enzyme (3A) domain)
  28 FILES SEARCHED...
  52 FILES SEARCHED...
  94 FILES SEARCHED...
L3           22 L1 AND (ENZYME (3A) DOMAIN)

=> duplicate
ENTER REMOVE, IDENTIFY, ONLY, OR (?):remove
ENTER L# LIST OR (END):l3
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, BIOCOMMERCE, DGENE,
DRUGMONOG2, IMSRESEARCH, FEDRIP, FOREGE, GENBANK, IMSPRODUCT, KOSMET,
MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, RDISCLOSURE, SYNTHLINE, CHEMLIST,
HSDB, MSDS-CCOHS, MSDS-OHS, RTECS, CONF, IMSDRUGCONF, DIOGENES, INVESTEXT,
USAN, FORIS, FORKAT, UFORDAT, AQUIRE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
DUPLICATE PREFERENCE IS 'BIOTECHABS, DISSABS, GENBANK, IFIPAT, USPATFULL, WPINDEX'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4            17 DUPLICATE REMOVE L3 (5 DUPLICATES REMOVED)

=> d l4 1-17 bib ab
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid
format requested.  Refer to file specific help messages or the
STNGUIDE file for information on formats available in individual
files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):filedefault

L4   ANSWER 1 OF 17  USPATFULL on STN
AN     2004:7768  USPATFULL
TI     Targeted therapeutic proteins
IN     LeBowitz, Jonathan H., Frontenac, MO, UNITED STATES
       Beverley, Stephen M., Clayton, MO, UNITED STATES
PA     Symbiontics, Inc. (U.S. corporation)
PI     US 2004006008      A1   20040108
AI     US 2002-272483     A1   20021016 (10)
RLI    Continuation-in-part of Ser. No. US 2002-136841, filed on 30 Apr 2002,
       PENDING
PRAI   US 2001-287531P     20010430 (60)
       US 2001-304609P     20010710 (60)
       US 2001-329461P     20011015 (60)
       US 2002-351276P     20020123 (60)
       US 2002-351276P     20020123 (60)
```

```
       US 2002-384452P     20020529 (60)
       US 2002-386019P     20020605 (60)
       US 2002-408816P     20020906 (60)
DT     Utility
FS     APPLICATION
LN.CNT 3120
INCL   INCLM: 514/008.000
       INCLS: 530/397.000; 435/069.400; 435/320.100; 435/325.000; 536/023.500;
              435/317.100
NCL    NCLM:  514/008.000
       NCLS:  530/397.000; 435/069.400; 435/320.100; 435/325.000; 536/023.500;
              435/317.100
IC     [7]
       ICM: C07K014-65
       ICS: C07H021-04; C12P021-02; C12N005-06; A61K038-30

L4   ANSWER 2 OF 17  USPATFULL on STN
AN     2004:7076  USPATFULL
TI     Targeted therapeutic proteins
IN     LeBowitz, Jonathan H., Frontenac, MO, UNITED STATES
       Beverley, Stephen M., Clayton, MO, UNITED STATES
       Sly, William S., St. Louis, MO, UNITED STATES
PA     Symbiontics, Inc. (U.S. corporation)
PI     US 2004005309      A1   20040108
AI     US 2002-272531     A1   20021016 (10)
PRAI   US 2002-408816P     20020906 (60)
       US 2002-386019P     20020605 (60)
       US 2002-384452P     20020529 (60)
DT     Utility
FS     APPLICATION
LN.CNT 3073
INCL   INCLM: 424/094.610
       INCLS: 435/069.100; 435/320.100; 435/201.000; 530/350.000; 536/023.500;
              435/325.000
NCL    NCLM:  424/094.610
       NCLS:  435/069.100; 435/320.100; 435/201.000; 530/350.000; 536/023.500;
              435/325.000
IC     [7]
       ICM: A61K038-47
       ICS: C07H021-04; C12N009-26; C07K014-705; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 3 OF 17  IFIPAT  COPYRIGHT 2004 IFI on STN DUPLICATE 1
AN     10273076  IFIPAT;IFIUDB;IFICDB
TI     COLLECTION OF PROKARYOTIC DNA FOR TWO HYBRID SYSTEMS HELICOBACTER PYLORI
       PROTEIN-PROTEIN INTERACTIONS AND APPLICATION THEREOF; GENERATION OF
       PREFERENTIAL NUCLEOTIDE SEQUENCE CLONES; OBTAIN NUCLEOTIDE SEQUENCES,
       FRAGMENT, INSERT INTO PLASMID, TRANSFORM CELLS, RECOVER TRANSFORMED CELLS
IN     Legrain Pierre (FR); Rain Jean-Christophe (FR); Selig Luc (FR)
PA     Unassigned Or Assigned To Individual (68000)
PI     US 2003017478   A1  20030123
AI     US 2001-12819       20011030
RLI    WO 2000-IB603       20000414 CONTINUATION          UNKNOWN
PRAI   EP 1999-401066      19990430
FI     US 2003017478       20030123
DT     Utility; Patent Application - First Publication
FS     CHEMICAL
       APPLICATION
CLMN   87
GI      8 Figure(s).
      FIG. 1 is a restriction map of the plasmid pAS2 Delta Delta which may be
       used for the yeast two-hybrid system.
      FIG. 2 is a restriction map of the plasmid pACTIIst which may be used for
       the yeast two-hybrid system.
```

FIG. 3 is a restriction map of the plasmid pUT18 which may be used for the **bacterial two-hybrid** system. In this figure, each multicloning site (MCS) is detailled.

FIG. 4 is a restriction map of the plasmid pUT18C which may be used for the **bacterial two-hybrid** system. In this figure, each multicloning site (MCS) is detailled.

FIG. 5 is a restriction map of the plasmid pT25 which may be used for the **bacterial two-hybrid** system. In this figure, each multicloning site (MCS) is detailled.

FIG. 6 is a restriction map of the plasmid pKT25 which may be used for the **bacterial two-hybrid** system. In this figure, each multicloning site (MCS) is detailled.

FIG. 7 is a schematic representation of the SID registered identification method. In this figure, the less-than less-than Full-length prey protein greater-than greater-than is the Open Reading Frame where the identified prey polypeptides are included, the Selected Interaction Domain SID registered is determined by comparison of every prey polypeptide fragment.

FIG. 8 is a restriction map of the plasmid pP6 which may be used for the yeast two-hybrid system.

L4 ANSWER 4 OF 17 USPATFULL on STN
AN 2003:330210 USPATFULL
TI Protein-protein interactions in adipocyte cells (3)
IN Legrain, Pierre, Paris, FRANCE
Whiteside, Simon, Cambridge, UNITED KINGDOM
Mao, Jen-I, Palo Alto, CA, UNITED STATES
Khrebtukova, Irina, San Francisco, CA, UNITED STATES
Luo, Shujun, Berkeley, CA, UNITED STATES
PA Hybrigenics, Paris, FRANCE (non-U.S. corporation)
PI US 2003232421 A1 20031218
AI US 2002-139794 A1 20020506 (10)
PRAI US 2001-288885P 20010504 (60)
DT Utility
FS APPLICATION
LN.CNT 13515
INCL INCLM: 435/226.000
INCLS: 435/069.100; 435/007.100; 435/320.100; 435/325.000; 536/023.200; 514/001.000
NCL NCLM: 435/226.000
NCLS: 435/069.100; 435/007.100; 435/320.100; 435/325.000; 536/023.200; 514/001.000
IC [7]
ICM: A61K031-00
ICS: G01N033-53; C07H021-04; C12N009-64; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 17 USPATFULL on STN
AN 2003:213743 USPATFULL
TI More protein-protein interactions in the inner ear
IN Daviet, Laurent, Paris, FRANCE
Legrain, Pierre, Paris, FRANCE
Petit, Christine, Le Plessis Robinson, FRANCE
Boeda, Batiste, Paris, FRANCE
El-Amraoui, Aziz, Paris, FRANCE
PA Hybrigenics, Paris, FRANCE (non-U.S. corporation)
PI US 2003148381 A1 20030807
AI US 2002-177191 A1 20020621 (10)
PRAI EP 2002-290277 20020205
US 2001-299848P 20010621 (60)
DT Utility
FS APPLICATION
LN.CNT 2681
INCL INCLM: 435/007.100

INCLS: 435/325.000; 435/320.100; 530/350.000; 514/001.000; 536/023.100
NCL NCLM: 435/007.100
NCLS: 435/325.000; 435/320.100; 530/350.000; 514/001.000; 536/023.100
IC [7]
ICM: A61K031-00
ICS: G01N033-53; C12P021-02; C12N005-06; C07K014-47; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 17 USPATFULL on STN
AN 2003:119691 USPATFULL
TI Subcellular targeting of therapeutic proteins
IN LeBowitz, Jonathan H., Frontenac, MO, UNITED STATES
Beverley, Stephen M., Clayton, MO, UNITED STATES
PA Symbiontics, Inc. (U.S. corporation)
PI US 2003082176 A1 20030501
AI US 2002-136841 A1 20020430 (10)
PRAI US 2001-287531P 20010430 (60)
US 2001-304609P 20010710 (60)
US 2001-329461P 20011015 (60)
US 2002-351276P 20020123 (60)
DT Utility
FS APPLICATION
LN.CNT 1959
INCL INCLM: 424/143.100
INCLS: 530/388.220
NCL NCLM: 424/143.100
NCLS: 530/388.220
IC [7]
ICM: A61K039-395
ICS: C07K016-28
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 17 USPATFULL on STN
AN 2003:79292 USPATFULL
TI Protein-protein interactions between Shigella flexneri polypeptides and mammalian polypeptides
IN Legrain, Pierre, Paris, FRANCE
PI US 2003055220 A1 20030320
AI US 2002-43487 A1 20020111 (10)
PRAI US 2001-261130P 20010112 (60)
DT Utility
FS APPLICATION
LN.CNT 11901
INCL INCLM: 530/350.000
NCL NCLM: 530/350.000
IC [7]
ICM: C07K001-00
ICS: C07K014-00; C07K017-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 17 USPATFULL on STN
AN 2003:57525 USPATFULL
TI Protein-protein interactions in adipocyte cells
IN Legrain, Pierre, Paris, FRANCE
Marullo, Stefano, Paris, FRANCE
Ralf, Jockers, Bures Sur Yvette, FRANCE
PI US 2003040089 A1 20030227
AI US 2002-38010 A1 20020102 (10)
PRAI US 2001-259377P 20010102 (60)
DT Utility
FS APPLICATION
LN.CNT 7738
INCL INCLM: 435/183.000
INCLS: 435/069.100; 435/007.100; 435/325.000; 435/320.100; 536/023.200;

```
                702/019.000
NCL     NCLM:   435/183.000
        NCLS:   435/069.100; 435/007.100; 435/325.000; 435/320.100; 536/023.200;
                702/019.000
IC      [7]
        ICM: G01N033-53
        ICS: G06F019-00; G01N033-48; G01N033-50; C07H021-04; C12N009-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 9 OF 17  USPATFULL on STN
AN      2003:10262  USPATFULL
TI      Proteins that interact with betaTrCP
IN      Legrain, Pierre, Paris, FRANCE
        Benarous, Richard, Paris, FRANCE
        Blot, Guillaume, Sarcelles, FRANCE
        Lassot, Irina, Sarcelles, FRANCE
PI      US 2003007956       A1   20030109
AI      US 2001-23530       A1   20011218 (10)
PRAI    US 2000-256276P      20001218 (60)
DT      Utility
FS      APPLICATION
LN.CNT 2028
INCL    INCLM: 424/093.210
        INCLS: 435/183.000; 435/320.100; 435/325.000; 435/455.000; 435/069.100
NCL     NCLM:  424/093.210
        NCLS:  435/183.000; 435/320.100; 435/325.000; 435/455.000; 435/069.100
IC      [7]
        ICM: A61K048-00
        ICS: C12P021-02; C12N005-06; C12N009-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 10 OF 17  DISSABS COPYRIGHT (C) 2004 ProQuest Information and
     Learning Company; All Rights Reserved on STN
AN   2003:4246  DISSABS   Order Number: AAI3051391
TI   Mutants of Vitreoscilla hemoglobin:  Comparison of site-directed mutants
     with wild type VHb regarding functional characteristics and DNT
     degradation
AU   Lee, Sang, Yeol [Ph.D.]; Webster, Dale A. [adviser]; Stark, Benjamin C.
     [adviser]
CS   Illinois Institute of Technology (0091)
SO   Dissertation Abstracts International, (2002) Vol. 63, No. 4B, p. 1683.
     Order No.: AAI3051391. 82 pages.
     ISBN: 0-493-65803-3.
DT   Dissertation
FS   DAI
LA   English

L4    ANSWER 11 OF 17  BIOTECHABS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN    2002-12227  BIOTECHABS
TI    New selected interacting domain polypeptides and polynucleotides, useful
      for treating or preventing infections or pathologies caused by hepatitis
      C virus (HCV) or those linked to HCV infection;
         double plasmid-mediated enzyme and green fluorescent and yellow
         fluorescent protein reporter gene transfer and expression in mammal
         cell for infection disease therapy and gene therapy
AU    LEGRAIN P; WHITESIDE S; WOJCIK J
PA    HYBRIGENICS SA
PI    EP 1178116 6 Feb 2002
AI    EP 2000-402225 3 Aug 2000
PRAI  EP 2000-402225 3 Aug 2000
DT    Patent
LA    English
OS    WPI: 2002-208115 [27]
```

L4 ANSWER 12 OF 17 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 3
AN 10207777 IFIPAT;IFIUDB;IFICDB
TI SID NUCLEIC ACIDS AND POLYPEPTIDES SELECTED FROM A PATHOGENIC STRAIN OF HEPATITIS C VIRUS AND APPLICATIONS THEREOF
IN Legrain Pierre (FR); Whiteside Simon (GB); Wojcik Jerome (FR)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002151484 A1 20021017
AI US 2001-921397 20010802
PRAI EP 2000-40225 20000803
FI US 2002151484 20021017
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 73
GI 14 Figure(s).

FIG. 1 consists of a general overview of HCV genome and its encoded polyprotein. The RNA coding strand is represented with a line for untranslated regions (NCR) and boxes for coding regions.

Positions and enzymes responsible for cleavage are indicated above. p7 is a secondary cleavage product of E2 (adapted from HOUGHTON, 1996).

FIG. 2 is a restriction map of the plasmid pAS2 Delta Delta which may be used for producing a recombinant "Selected Interacting Domain (SID registered)" polypeptide or a recombinant marker compound of the invention.

FIG. 3 is a restriction map of the plasmid pACTII which may be used for producing a recombinant "Selected Interacting Domain (SID registered)".

FIG. 4 is a restriction map of the plasmid pUT18 which may be used for producing a recombinant "Selected Interacting Domain (SID registered)".

FIG. 5 is a restriction map of the plasmid pUT18C which may be used for producing a recombinant "Selected Interacting Domain (SID registered)".

FIG. 6 is a restriction map of the plasmid pT25 which may be used for producing a recombinant "Selected Interacting Domain (SID registered)".

FIG. 7 is a restriction map of the plasmid pKT25 which may be used for producing a recombinant "Selected Interacting Domain (SID registered)".

FIG. 8 is an illustration of the first step of selecting a SID registered nucleic acid of the invention, wherein it is performed a selection of different sets of overlapping nucleic acids primarily selected through a two-hybrid method, in order to define pre-SID nucleic acids. Three fragments frg1, frg2 and frg3 of lengths l1, l2 and l3 respectively. Fragment l1 and l2 are clustered together if the length of intersection, I, is greater than 30% of l1 and l2. Fragment frg3 is grouped with fragments frg and frg2 if the length of intersection between frg1 and frg3, l', is greater than 30% of l1 and l3 and if the length of intersection between frg 2 and frg 3, l greater-than greater-than, is greater than 30% of l2 and l3.

FIG. 9 illustrates the selection of pre-SID registered nucleic acid from a particular set of overlapping nucleic acids previously selected through a two-hybrid method. The pre-SID registered is defined as the intersection of all the fragments (frg1-6) in a cluster.

FIG. 10 illustrates the selection of a SID registered nucleic acid from the overlapping regions between two pre-SID nucleic acids. A SID registered is defined if the length of overlap between two pre-SID registered s, l, is greater than 30 bp. Further SID registered s are defined by non-overlapping areas if their length (l') represents more than 30% of the length of one of the fragments which contributes to the corresponding preSID registered (frg1-6).

FIG. 11 illustrates a further step of determining SID registered nucleic acids after alignment of two overlapping SID nucleic acids identified according to FIG. 10. Fragments frg1' and frg2' contribute to both SID registered 1 and SID registered 2 (top panel). For each SID registered, the number of fragments are counted and fragments are assigned to the SID registered with the most fragments. The remaining fragments are reanalysed and a new SID registered is defined as the region of intersection of these fragments (bottom panel, SID registered 2'-fragment

3' and fragment 4'.

FIG. 12 illustrates a map of the vector pB5 which may be used in example 1.

FIG. 13 illustrates a map of the vector pP6 which may be used in example 1.

L4 ANSWER 13 OF 17 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 4
AN 10163136 IFIPAT;IFIUDB;IFICDB
TI BACTERIAL MULTI-HYBRID SYSTEM AND APPLICATIONS; KIT FOR USE AS A TOOL IN SIGNAL GENERATION IN GENETIC ENGINEERING
IN Karimova Gouzel (FR); Ladant Daniel (FR); Ullmann Agnes (FR)
PA Institut Pasteur FR (42312)
PI US 2002106783 A1 20020808
AI US 2001-973013 20011010
RLI US 1998-203681 19981201 DIVISION GRANTED
PRAI US 1997-67308P 19971204 (Provisional)
FI US 2002106783 20020808
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 45
GI 13 Figure(s).

FIG. 1 depicts the principle of an E. coli multi-hybrid system based on functional complementation of the catalytic domain of Bordetella adenylate cyclase (CyaA) fragments.

The upper part schematizes the basic principle of in vivo complementation between the two fragments of the catalytic domain of B. pertussis adenylate cyclase. The two boxes represent the T25 and T18 fragments corresponding to amino acids 1 to 224 and 225 to 399 of the CyaA protein. In A, the full-length catalytic domain (residues 1 to 399), when expressed in E.coli, exhibits a basal calmodulin-independent activity that results in cyclic adenosine monophosphate (cAMP) synthesis. In B, the two fragments T25 and T18, when coexpressed as independent polypeptides, are unable to interact and no cAMP synthesis occurs. In C, the two fragments, fused to two interacting proteins, X and Y, are brought into close proximity resulting in functional complementation, followed by cAMP production.

The lower part schematizes the readout of the complementation. cAMP, synthesized in an E. coli cya strain by the complementing T25 and T18 pairs, binds to the catabolite activator protein, CAP. The cAMP/CAP complex (C) can then recognize specific promoters and switch on the transcription of the corresponding genes. These reporter genes can be either natural E.coli genes, such as lacZ or mal genes, or synthetic ones, such as antibiotic resistance genes fused to a cAMP/CAP dependent promoter.

FIG. 2 is a schematic representation of plasmids.

The open boxes represent the open reading frames of betalactamase (bla) and chloramphenicol acetyl transferase (cat) genes. The dark boxes correspond to the open reading frame of cyaA' with codon numbers indicated below. The hatched boxes correspond to the multicloning site sequences (MCS) that are fused at the indicated position of the cya open reading frame. The origin of replication of the plasmids is indicated by dotted boxes.

FIG. 3.1 and FIG. 3.2 are schematic representations of other plasmids.

The left part represents the maps of the plasmids, with the different antibiotic-selectable markers (chloramphenicol acetyl transferase (cat), aminoglycoside phosphotransferse (kan) and beta-lactamase (bla), the origin of replication and the position of the multicloning site sequences (MCS) relative to the T25 and T18 open reading frames. The right part describes the nucleotide sequence of the multicloning site sequences (MCS) fused to T25 (FIG. 3.2) or T18 (FIG. 3.1) and the corresponding reading frames.

FIG. 4 depicts the results of screening of interacting proteins with the **bacterial two-hybrid** system.

DHPI cells were cotransformed with a mixture of plasmids pT18, pT18-zip, and PT18-Tyr, and either pT25 (A) or pT25-zip (B), plated on LB-X-Gal agar plates containing 0.5 mM IPTG, ampicillin and chloramphenicol, and incubated for 30 hrs at 30 degrees C. Note that the cya+ colonies are larger than the cya ones.

FIG. 5 relates to the mapping of interacting domains of the B. stearothermophilus tyrosyl-tRNA synthetase.

DNA fragments encoding the indicated polypeptide segments of the tyrosyl-tRNA synthetase (the numbers correspond to the amino acid residues) were amplified by PCR using appropriate primers and cloned into pT25 and/or pT18. The functional complementation between the indicated chimeric proteins was assayed on DHP1 cells co-transformed with the corresponding plasmids by measuring the beta-galactosidase activity.

FIG. 6 relates to the mapping of interacting domains of B. pertussis B.vgA.

DNA fragments encoding indicated polypeptide segments of BvgA (the numbers correspond to the amino acid residues) were amplified by PCR using appropriate primers and cloned into pKT25 and/or pUTT18C. The functional complementation between the indicated chimeric proteins was assayed on DHP1 cells cotransformed with the corresponding plasmids by measuring the beta-galactosidase activity.

L4 ANSWER 14 OF 17 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 5
AN 10101671 IFIPAT;IFIUDB;IFICDB
TI **BACTERIAL TWO-HYBRID** SYSTEM FOR PROTEIN-PROTEIN INTERACTION SCREENING, NEW STRAINS FOR USE THEREIN, AND THEIR APPLICATIONS; KIT FOR THE MONITORING PREFERENTIAL PROTEIN ASSOCIATIONS AND ACTIVITIES
IN Karimova Gouzel (FR); Ladant Daniel (FR); Legrain Pierre (FR); Selig Luc (FR); Ullmann Agnes (FR)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002045237 A1 20020418
AI US 2001-818939 20010328
PRAI US 2000-192886P 20000329 (Provisional)
FI US 2002045237 20020418
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 49
GI 4 Figure(s).

FIG. 1 shows the results of zip-zip interaction in different E. coli cya strains. beta-galactosidase activity is shown for three different strains, DHM1, BHT101, and DHP1.

FIG. 2 shows the results of interaction in different strains. beta-galactosidase activity is shown for the strains DHM1 and BTH101.

FIG. 3 is a map of plasmid pUT18C NewSfi.

FIG. 4 is a map of plasmid pKT25 NewSfi.

L4 ANSWER 15 OF 17 USPATFULL on STN
AN 2001:235087 USPATFULL
TI Bacterial multi-hybrid system and applications thereof
IN Ladant, Daniel, Cachan, France
Karimova, Gouzel, Paris, France
Ullmann, Agnes, Paris, France
PA Institut Pasteur, France (non-U.S. corporation)
PI US 6333154 B1 20011225
AI US 1998-203681 19981201 (9)
PRAI US 1997-67308P 19971204 (60)
DT Utility
FS GRANTED
LN.CNT 1394
INCL INCLM: 435/006.000
INCLS: 435/007.320; 435/029.000; 435/488.000; 435/007.600; 530/350.000
NCL NCLM: 435/006.000

NCLS: 435/007.320; 435/007.600; 435/029.000; 435/488.000; 530/350.000
IC [7]
ICM: C12Q001-68
EXF 435/7.1; 435/7.2; 435/7.32; 435/7.6; 435/7.91; 435/29; 435/440; 435/488; 435/69.1; 435/4; 435/6; 530/350; 436/63; 436/808
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 17 WPINDEX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2000-687535 [67] WPINDEX
DNN N2000-508291 DNC C2000-209320
TI A two-hybrid system for identifying compounds useful in the treatment of e.g. gastric ulcers comprises producing a collection of recombinant cell clones.
DC B04 D16 T01
IN LEGRAIN, P; RAIN, J; SELIG, L
PA (HYBR-N) HYBRIGENICS SA; (LEGR-I) LEGRAIN P; (RAIN-I) RAIN J; (SELI-I) SELIG L
CYC 22
PI WO 2000066722 A1 20001109 (200067)* EN 265p C12N015-10
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: CA JP US
EP 1173560 A1 20020123 (200214) EN C12N015-10
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
US 2003017478 A1 20030123 (200310) C12Q001-68
JP 2002542821 W 20021217 (200312) 284p C12N015-09
ADT WO 2000066722 A1 WO 2000-IB603 20000414; EP 1173560 A1 EP 2000-920989 20000414, WO 2000-IB603 20000414; US 2003017478 A1 Cont of WO 2000-IB603 20000414, US 2001-12819 20011030; JP 2002542821 W JP 2000-615746 20000414, WO 2000-IB603 20000414
FDT EP 1173560 A1 Based on WO 2000066722; JP 2002542821 W Based on WO 2000066722
PRAI EP 1999-401066 19990430
IC ICM C12N015-09; C12N015-10; C12Q001-68
ICS A61K035-76; A61K038-00; A61K039-106; A61K039-395; A61K039-40; A61K045-00; A61K048-00; C07K014-195; C07K014-205; C07K014-245; C07K014-315; C07K016-12; C07K019-00; C12N001-15; C12N001-18; C12N001-19; C12N001-21; C12N005-10; C12N015-31; C12N015-86; C12P021-02; C12P021-08; G01N033-15; G01N033-50; G01N033-53; G01N033-566; G06F017-00

L4 ANSWER 17 OF 17 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BX321860 GenBank (R)
GenBank ACC. NO. (GBN): BX321860 AL954747
GenBank VERSION (VER): BX321860.1 GI:30180445
CAS REGISTRY NO. (RN): 509062-28-6
SEQUENCE LENGTH (SQL): 303050
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Bacteria
DATE (DATE): 23 Apr 2003
DEFINITION (DEF): Nitrosomonas europaea ATCC 19718, complete genome; segment 5/10.
KEYWORDS (ST): complete genome
SOURCE: Nitrosomonas europaea ATCC 19718
ORGANISM (ORGN): Nitrosomonas europaea ATCC 19718
Bacteria; Proteobacteria; Betaproteobacteria; Nitrosomonadales; Nitrosomonadaceae; Nitrosomonas
NUCLEIC ACID COUNT (NA): 75874 a 81366 c 73494 g 72316 t
REFERENCE: 1
AUTHOR (AU): Chain,P.; Lamerdin,J.; Larimer,F.; Regala,W.; Land,M.; Hauser,L.; Hooper,A.; Klotz,M.; Norton,J.; Sayavedra-Soto,L.; Arciero,D.; Hommes,N.; Whittaker,M.; Arp,D.
TITLE (TI): Complete Genome Sequence of the Ammonia-Oxidizing

Bacterium and Obligate Chemolithoautotroph Nitrosomonas europaea
JOURNAL (SO): J. Bacteriol., 185 (9), 2759-2773 (2003)
OTHER SOURCE (OS): CA 138:298615
REFERENCE: 2 (bases 1 to 303050)
AUTHOR (AU): Larimer,F.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-NOV-2002) Submitted on behalf of the Nitrosomonas genome consortium, the DOE Joint Genome Institute, Production Genomics Facility, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA, and the Genome Analysis Group, Oak Ridge National Laboratory, 1060 Commerce Park Drive, Oak Ridge, TN 37831, USA; larimerfw@ornl.gov

FEATURES (FEAT):